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EXAMINER	
BELANI, KISHIN G	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/768,343	PESSI, PEKKA	
	Examiner	Art Unit	
	KISHIN G. BELANI	2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-14,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-14,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to Applicant's amendment filed on 11/04/2008. **Independent Claims 1, 7 and 12 have been amended**. Dependent claims 4-6, 8, 10, 13 and 14 are amended to correct minor informalities. **Claims 9 and 15-20 have been cancelled. New claims 21 and 22 have been added**. Claims 1-8, 10-14 and 21-22 are now pending in the present application. The applicant's amendments to claims are shown in ***bold and italics***, and the examiner's response to the claim amendments is shown in **bold** in this office action. **This Action is made FINAL.**

Claim Objections

The applicants have used strikethrough to delete text of five characters or less in the amended claims 4 and 7. In cases where the strikethrough is hard to distinguish, or five or less characters are being deleted, double brackets should be used (see 37 CFR 1.121 (c) (2)). As such, please make the appropriate corrections to the claims text, wherever five or less characters have been striken through, in order to avoid receiving a notice of non-compliant amendments (PTOL-324).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by **Watson et al. (U.S. Patent Publication # 7,213,143 B1).**

Consider **claim 1**, Watson et al. show and disclose a method comprising:

detecting control messages at a communication intermediary from a compressed stream of messages (column 2, lines 27-29 which disclose that SIGCOMP is used link-by-link, i.e. between an end device and first proxy or between pair of proxies; column 2, lines 34-37 which disclose that the first SIGCOMP message contains instructions for the recipient to decompress the message, the instructions being in the form of a special byte-code to be run on a UDVM (Universal De-compressor Virtual Machine), thereby disclosing ability to detect control messages at a communication intermediary from a compressed stream of messages);

decompressing the detected control messages at the communication intermediary (Fig. 4, that shows a SIP message after decompression by the communication intermediary (proxy device); column 7, lines 61-67 and column 8, line 1 that disclose the same details); and

passing user messages from the compressed stream of messages through the communication intermediary without modifications (Abstract, lines 12-16 which disclose

that encryption is applied after the message has traversed the end terminal link; on the first proxy link, the message is sent without encryption and can therefore benefit from compression; column 1, lines 40-43 which disclose that message bodies carry information end-to-end between multi-media devices, but message headers carry routing information and are used by the proxies)*;*

wherein the user messages are not decompressed at any point between a first end device and a second end device **(column 3, lines 18-34 which disclose a method comprising the steps of compressing the data (user messages) to be transmitted over a wireless network and encrypting the data at the first hop proxy after the message has the end terminal link; further disclosing that on the first proxy link, the message is sent over without S/MIME encryption and can therefore benefit from compression (see column 2, lines 61-67); column 1, lines 40-51, which disclose that message headers carry routing information and protocol machinery and are used by the proxies; but message bodies carry information end-to-end between multi-media devices, further disclosing that the proxies do not look at the message bodies, so the content and any associated encryption is transparent to proxies; column 2, lines 19-37 further disclose that the first SIGCOMP message contains instructions in the form of UDVM (Universal Decompressor Virtual Machine) for the recipient to decompress the message, thereby disclosing that the user and SIGCOMP messages are compressed at the first device end in order to gain from compressing unencrypted bulk user and SIGCOMP messages before encryption at the first device end proxy, where the**

SIGCOMP (header) messages are uncompressed to determine the routing information from the headers, since the proxies do not look at the message bodies (user messages), there is no need to decompress the user messages and waste bandwidth by sending uncompressed user messages; after the compressed user message has been decrypted at the receiving end proxy, and transmitted to the recipient end device, it uses the previously sent decompressor (UDVM) code to uncompress the received user message; no purpose will be served by sending the UDVM code to the recipient end device, if the received user message has already been uncompressed for it).

Consider **claim 2**, and **as it applies to claim 1 above**, Watson et al. do disclose a method, wherein the control messages comprise a multiplex identifier (column 2, lines 34-37 that disclose special byte-code in the first SIGCOMP message containing instructions to decompress the message).

Consider **claim 3**, and **as it applies to claim 2 above**, Watson et al. do disclose a method, wherein the multiplex identifier is located at the beginning of a communication session (column 2, lines 34-37 that disclose special byte-code in the first SIGCOMP message containing instructions to decompress the message).

Consider **claim 4**, and **as it applies to claim 2 above**, Watson et al. do disclose a method, wherein detecting control messages at ***the*** communication intermediary from

the compressed stream of messages comprises detecting the multiplex identifier (column 2, lines 39-42 which disclose that subsequent messages rely on the state at the receiver (a communication intermediary) created by the previous messages, including the decompression code (including multiplex identifier) uploaded with the first message, thereby disclosing that the decompression code has been detected at the receiver).

Consider **claim 5**, and **as it applies to claim 2 above**, Watson et al. do disclose a method, wherein ***the*** user messages are messages without the multiplex identifier (column 1, lines 40-43 which disclose that only message headers (control messages) carry routing information and protocol machinery and are used by proxies; message bodies (user messages) carry information end-to-end between multimedia devices, thereby disclosing that user messages are messages without the multiplex identifier).

Consider **claim 6**, and **as it applies to claim 1 above**, Watson et al. do disclose a method, wherein the control messages are hop-by-hop messages and ***the*** user messages are end-to-end messages (column 1, lines 40-43 which disclose that only message headers (control messages) carry routing information and protocol machinery and are used by proxies (i.e. are hop-by-hop messages); whereas message bodies (user messages) carry information end-to-end between multimedia devices).

Consider **claim 7**, Watson et al. show and disclose a***n apparatus*** comprising:

an input ***configured to*** receive a compressed stream of messages ***originating from a first end device intended for a second end device*** (**Figs. 3-4 showing device UA2 (second end device) receiving compressed stream of messages from UA1 (first end device) via intermediate proxy devices 32 and 36**; column 6, lines 41-47 that disclose the same details);

an output ***configured to*** transmit messages ***intended for the second end device*** (Fig.3, proxy device 36 shown connected to the SIP network; Fig. 4, showing security proxy device 36 transmitting a SIP message to UA2; column 6, lines 41-47 that disclose the same details);

a processor ***configured to*** detect control messages included in the ***compressed stream of*** messages received by the input, wherein the processor ***is further configured to*** decompress the control messages and direct non-control messages ***from the compressed stream of messages*** to be communicated through the output without modification (column 7, lines 66-67 and column 8, line 1, that disclose decompression process carried out by the security proxy, thereby disclosing data processing capability; column 2, lines 27-29 which disclose that SIGCOMP is used link-by-link, i.e. between an end device and first proxy or between pair of proxies; column 2, lines 34-37 which disclose that the first SIGCOMP message contains instructions for the recipient to decompress the message, the instructions being in the form of **a** special byte-code to be run on a UDVM (Universal De-compressor Virtual Machine), thereby disclosing ability to detect control messages at a communication intermediary from a compressed stream of messages; Abstract, lines 12-16 which disclose that encryption is

applied after the message has traversed the end terminal link; on the first proxy link, the message is sent without encryption and can therefore benefit from compression; column 1, lines 40-43 which disclose that message bodies carry information end-to-end between multi-media devices, but message headers carry routing information and are used by the proxies)*;*

wherein the non-control messages are not decompressed at any point between the first end device and the second end device **(column 3, lines 18-34 which disclose a method comprising the steps of compressing the data (user messages) to be transmitted over a wireless network and encrypting the data at the first hop proxy after the message has the end terminal link; further disclosing that on the first proxy link, the message is sent over without S/MIME encryption and can therefore benefit from compression (see column 2, lines 61-67); column 1, lines 40-51, which disclose that message headers carry routing information and protocol machinery and are used by the proxies; but message bodies carry information end-to-end between multi-media devices, further disclosing that the proxies do not look at the message bodies, so the content and any associated encryption is transparent to proxies; column 2, lines 19-37 further disclose that the first SIGCOMP message contains instructions in the form of UDVM (Universal Decompressor Virtual Machine) for the recipient to decompress the message, thereby disclosing that the user and SIGCOMP messages are compressed at the first device end in order to gain from compressing unencrypted bulk user and SIGCOMP messages before encryption at the first device end proxy, where the**

SIGCOMP (header) messages are uncompressed to determine the routing information from the headers, since the proxies do not look at the message bodies (user messages), there is no need to decompress the user messages and waste bandwidth by sending uncompressed user messages; after the compressed user message has been decrypted at the receiving end proxy, and transmitted to the recipient end device, it uses the previously sent decompressor (UDVM) code to uncompress the received user message; no purpose will be served by sending the UDVM code to the recipient end device, if the received user message has already been uncompressed for it).

Consider **claim 8**, and **as it applies to claim 7 above**, Watson et al. disclose the claimed apparatus, wherein the processor ***is configured to*** detect control messages by identifying a special byte-code contained in the control messages (column 2, lines 34-37 that disclose special byte-code in the first SIGCOMP message containing instructions to decompress the message).

Consider **claim 11**, and **as it applies to claim 7 above**, Watson et al. disclose the claimed apparatus, wherein the modification comprises decompression (column 8, lines 64-67 and column 9, lines 1-8 which disclose that the security proxy provides a method for end-to-end compression, thereby disclosing no modification (i.e. decompression) of user packets).

Consider **claim 12**, Watson et al. show and disclose a system comprising:

a first ***end*** device ***comprising*** a compressor and a de-compressor (Fig. 3, UA1 block 30 as a first communication device; Fig. 4, showing compressed data being sent from UA1 to Security proxy for encryption; column 7, lines 61-62 which disclose that UA1 compresses the outgoing message, thereby disclosing a compressor within UA1; column 8, lines 28-29 which disclose that UA1 performs decompression on the received message, thereby disclosing a de-compressor within UA1);

a second ***end*** device ***comprising*** a compressor and a de-compressor (Fig. 3, UA2 block 38 as a second communication device; column 7, lines 19-22 which disclose that UA2 receives decrypted but compressed message from the receiving proxy, thereby disclosing a de-compressor within UA2 to uncompress the received message; column 7, lines 23-26 which disclose compression over low-bandwidth links 31 (at UA1) and 37 (at UA2), thereby disclosing a compressor within UA2); and

an intermediate relay ***configured to*** detect and decompress control messages in messages ***originating*** from the first ***end*** device, and pass user messages ***intended for*** the second ***end*** device ***through*** without decompression (Fig. 3, unmarked intermediate relays 32 and 36; column 2, lines 27-29 which disclose that SIGCOMP is used link-by-link, i.e. between an end device and first proxy or between pair of proxies; column 2, lines 34-37 which disclose that the first SIGCOMP message contains instructions for the recipient to decompress the message, the instructions being in the form of **a** special byte-code to be run on a UDVM (Universal De-compressor Virtual Machine), thereby disclosing ability to detect control messages at a communication intermediary from a

compressed stream of messages; Fig. 4, that shows a SIP message after decompression by the communication intermediary (proxy device); column 7, lines 61-67 and column 8, line 1 that disclose the same details; Abstract, lines 12-16 which disclose that encryption is applied after the message has traversed the end terminal link; on the first proxy link, the message is sent without encryption and can therefore benefit from compression; column 1, lines 40-43 which disclose that message bodies carry information end-to-end between multi-media devices, but message headers carry routing information and are used by the proxies)*;*

wherein the user messages are not decompressed at any point between the first end device and the second end device **((column 3, lines 18-34 which disclose a method comprising the steps of compressing the data (user messages) to be transmitted over a wireless network and encrypting the data at the first hop proxy after the message has the end terminal link; further disclosing that on the first proxy link, the message is sent over without S/MIME encryption and can therefore benefit from compression (see column 2, lines 61-67); column 1, lines 40-51, which disclose that message headers carry routing information and protocol machinery and are used by the proxies; but message bodies carry information end-to-end between multi-media devices, further disclosing that the proxies do not look at the message bodies, so the content and any associated encryption is transparent to proxies; column 2, lines 19-37 further disclose that the first SIGCOMP message contains instructions in the form of UDVM (Universal Decompressor Virtual Machine) for the recipient to decompress the message,**

thereby disclosing that the user and SIGCOMP messages are compressed at the first device end in order to gain from compressing unencrypted bulk user and SIGCOMP messages before encryption at the first device end proxy, where the SIGCOMP (header) messages are uncompressed to determine the routing information from the headers, since the proxies do not look at the message bodies (user messages), there is no need to decompress the user messages and waste bandwidth by sending uncompressed user messages; after the compressed user message has been decrypted at the receiving end proxy, and transmitted to the recipient end device, it uses the previously sent decompressor (UDVM) code to uncompress the received user message; no purpose will be served by sending the UDVM code to the recipient end device, if the received user message has already been uncompressed for it).

Consider **claim 13**, and **as it applies to claim 12 above**, Watson et al. do disclose a system, wherein the intermediate relay ***is configured to*** detect control messages ***by*** detecting an identifier located in the messages (column 2, lines 34-37 that disclose special byte-code in the first SIGCOMP (control) message containing instructions to decompress the message).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was

made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watson et al. (U.S. Patent Publication # 7,213,143 B1)** in view of **Nessett et al. (U.S. Patent Publication # 6,421,734 B1).**

Consider **claim 10**, and **as it applies to claim 7 above**, Watson et al. show and disclose the claimed apparatus, including disclosing that the control messages are used at the beginning of a session (column 2, lines 34-37 that disclose special byte-code in the first SIGCOMP message containing instructions to decompress the message), except disclosing that the processor ***is configured to*** enter a forwarding mode after the control messages are received.

In the same field of endeavor, Nessett et al. show and disclose that the processor ***is configured to*** enter a forwarding mode after the control messages are received (Fig. 5, Compression module 606 and Filter Setup module 607; column 7, lines 42-67 and column 8, lines 1-18 which disclose that the session filter is setup to identify

packets; if the packets use the filter, they are forwarded without applying compression resources of the intermediate device).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a device wherein the processor enters a forwarding mode after the control messages are received, as taught by Nessett et al., in the method of Watson et al., so as to eliminate unnecessary processing that cause delay in the delivery of the packets to the end device.

Consider **claim 14**, and **as it applies to claim 12 above**, Watson et al. show and disclose the claimed invention, except wherein the intermediate relay ***is configured to*** enter forwarding mode after control messages are received.

In the same field of endeavor, Nessett et al. show and disclose a system wherein the intermediate relay enters forwarding mode after control messages are received (Fig. 5, Compression module 606 and Filter Setup module 607; column 7, lines 42-67 and column 8, lines 1-18 which disclose that the session filter is setup to identify packets; if the packets use the filter, they are forwarded without applying compression resources of the intermediate device).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a system wherein the intermediate relay enters forwarding mode after control messages are received, as taught by Nessett et al., in the system of Watson et al., so as to eliminate unnecessary processing that cause delay in the delivery of the packets to the end device.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Watson et al. (U.S. Patent Publication # 7,213,143 B1)** in view of **Price et al. (RFC 3320, Signaling Compression (SIGCOMP) non-patent literature, January 2003, applicant's IDS).**

Consider **claim 21**, and **as it applies to claim 1 above**, Watson et al. show and disclose the claimed method, except wherein the control messages comprise a multiplexing of compressed control and user-plane messages (MUCCUP) bytecode section.

In the same field of endeavor, Price et al. show and disclose the claimed method, wherein the control messages comprise a multiplexing of compressed control and user-plane messages (MUCCUP) bytecode section (Fig. 3, that shows two versions of a multiplexed sigcomp message, with the version to the right (UDVM bytecode) corresponding to the claimed MUCCUP bytecode section, pages 22-24, section 7 disclose the same details; furthermore the UDVM section may also be used for other user-specified functions as shown in Fig. 5 (specifically reserved words 10-31) and disclosed on pages 25-26, section 7.2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide, in the control messages, a multiplexing of compressed control and user-plane messages (MUCCUP) bytecode section, as taught

by Price et al., in the method of Watson et al., so as to provide any additional vendor-specific features to the services offered.

Consider **claim 22**, and **as it applies to claim 1 above**, Watson et al., as modified by Price et al., further show and disclose the claimed method, wherein the MUCCUP bytecode section comprises a detectable pattern, wherein the detectable pattern indicates the presence of a control message (Fig. 3, that shows two versions of a multiplexed sigcomp message, with the version to the right (UDVM bytecode) corresponding to the claimed MUCCUP bytecode section, pages 22-24, section 7 disclose the same details; furthermore the UDVM section may also be used for other user-specified functions as shown in Fig. 5 (specifically reserved words 10-31) and disclosed on pages 25-26, section 7.2; also to note that the first five bits of the multiplexed message shown in Fig. 3 are all set to 1, so as to indicate multiplexed sigcomp and user messages).

Response to Arguments

Applicants' arguments filed 11/04/2008 have been fully considered but they are not persuasive.

The examiner respectfully disagrees with applicants' arguments as the applied references in the prior office actions provide adequate support and clarification for rejecting the claims. Therefore, the examiner's rejection of 08/14/2008 is maintained in this office action.

Since the applicant has cancelled the claims 16-20 that were rejected for the **35 U.S.C. 101** violations, that rejection has been withdrawn.

Consider **independent claims 1, 7 and 12.** The applicant has argued that in the Watson et al. reference, the security proxy receives an entire compressed message from UA1 and then decompresses the entire message, and the message is then transmitted from the security proxy to the second end terminal UA2 in the decompressed form, citing Fig. 4 and column 7, lines 52-66. The examiner respectfully disagrees with this assessment. The security proxy has no need to decompress the user messages, since all the information it needs is found only in the control (header) message. So, only the control message (message header in a multiplexed stream of messages) portion of the composite compressed message need be decompressed. The cited portion of Watson et al. (column 1, lines 40-51) clearly discloses that "Message headers carry routing information and protocol machinery and are used by the proxies. Message bodies carry information end-to-end between multimedia devices. The proxies do not look at the message bodies, so the content and any associated encryption is transparent to proxies". Why would an intermediate proxy decompress a compressed user message it receives and transmit an uncompressed message wasting bandwidth unnecessarily, when it does not even look at the user message? Why would the final recipient end proxy receive a UDVM decompressor in the prior message if the user messages it receives are already decompressed? The sending end device proxy only need to decompress the message according to SIP compression, so that only the multiplexed header messages are decompressed and the routing information carried

within them used for further transmission of the multiplexed and compressed messages to the next hop. Specific columns and lines supporting the examiner's response are listed in the rejections for these claims.

No new arguments are presented for any of the remaining claims. Therefore, **claims 1-8, 10-14 and 21-22 remain rejected.**

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Art Unit: 2443

Hand-delivered responses should be brought to

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Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kishin G. Belani whose telephone number is (571) 270-1768. The Examiner can normally be reached on Monday-Friday from 6:00 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-0800.

/K. G. B./
Examiner, Art Unit 2443

February 6, 2007

/George C Neurauter, Jr./
Primary Examiner, Art Unit 2443